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mToken CryptoID Product Introduction



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Revision Record

Date	Revision Version	Sec No.	Change Description	Author
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Product Overview

Century Longmai's mToken CryptoID is a new generation smartcard chip based two-factor USB authenticator utilizing CCID drivers. CCID drivers work to protect the USB connection and are therefore less susceptible to packet sniffing thus providing stronger authentication. Moreover, the embedded Smartcard technology allows for highly robust authentication and verification deployments across multi-industry.

The IT administrators deploying mToken CryptoID benefit from a wide range of available APIs for a seamless integration with their existing, or custom authentication applications on multiple platform; in addition the end users of benefit from driverless Plug & Play operations (without need to manually install any software), which allows for unproblematic yet secure identification in web services, E-mail protection, VPN login, Windows smartcard logon for both network and local based authentication.

mToken CryptoID Product Specifications & Features

Product Features

✓ **Offers multiple application security Authentication support**

mToken CryptoID supports standard smart card applications like Windows smart card logon, VPN, Bit Locker .etc.

✓ **Smart Card Based**

Utilizes 32-bit smart card technology enabling smart card based authentication and strong authentication.

✓ **On-Board Encryption processing**

Encryption and decryption processes take place on-board the mToken device, minimizing the risk of performing the process locally on the host computer.

✓ **Non-Repudiation Digital Signing**

Offers non-repudiation digital signing and storing of transactions and documents through PKI technology, ensuring the authenticity of electronic transactions in finance and retail industries.

✓ **Multiple Algorithms Employed**

Makes use of several industry-approved encryption algorithms including:

- Symmetric Algorithm: DES, 3DES, AES168, AES192, AES256
- Asymmetric Algorithm: RSA1024/2048, ECDSA256/512
- Digest Algorithm: MD5, SHA1, SHA256, SHA384, SHA512

✓ **Secure File System**

Secure file system for storage of digital credentials and files using the three-level permission system.

✓ **Self-Lock Capability**

Ability to automatically self-lock the device after a set limit of maximum logon attempts has been reached.

✓ **Plug-and-Play**

mToken CryptoID is certified from Microsoft HCK/HLK and automatically install drivers from Microsoft Windows Update.

✓ **Unique Global Hardware ID**

Employs both a unique global hardware ID and user-defined 32-bit software ID for device own identification.

✓ **Three Level Permission System**

Implements a three-level permission system: Administrator, User, and Guest, in order of most to least privileges determining the functions that can be performed with the token.

✓ **Encrypted Credentials**

Credentials are encrypted and stored on the device and cannot be exported.

✓ **Cryptography Standards Compliant**

Microsoft SmartCard Mini Driver

Microsoft CryptoAPI and CNG

PKCS# 11 V2.20

X509 v3 certificate storage

SSL V3, IPSEC/KEC, PC/SC, CCID

✓ **Custom API Support for numerous applications**

✓ **Multiple Platform Compatibility**

Support across various OS platform including XP, Server 2003, Vista and 7,8,10 Mac OS X , and Linux

✓ **OEM Customization**

Distinguishing features such as logos and the device's general appearance, casing, are customizable upon customers' request.

Technical Specifications

	Parameter
Power supply	USB Port
Working Voltage	5V (USB Chargeable)
Working current	50mA
Working temperature	0 – 70°C

Storing temperature	-20 – 85°C
Casing Material	Metal
Communication	USB CCID
Interface Standard	USB 2.0 High speed support; compliant with 3.0
Processor	32-bit Smartcard chip
Storage space	Standard version designed with a secure 128K data storage area for certificate, key pair and sensitive data storage, Optional storage (64K-192K)
CD-ROM	Virtual CD-ROM Embedded Default 2M, Optional (2M-8M)
Data Retention	At least 10 Years
Cryptography Standards Compliant	Microsoft Smart Card Mini Driver Microsoft CryptoAPI and CNG PKCS# 11 V2.20 X509 v3 certificate storage SSL V3, IPSEC/KEC, PC/SC, CCID

Driverless, Plug-and-Play

While adopting USB CCID technology, mToken CryptoID is the standard real Plug-and-Play with Auto-installed CSP/Mini Driver and Management Device which reduce driver compatibility risk and ensures system stability.

High performance and High security

mToken CryptoID is based on high level smart card chip technology ensuring that users' sensitive data is protected from possible attacks. Its 32-bit CPU and high speed USB port guarantee data transfer and data operation efficiency; the on-board secure cryptographic algorithms: RSA, 3DES, AES, etc.; guarantee fast generation of RSA key pairs and multiple application security satisfying both corporate, financial and retail security needs.

Multiple platforms support

mToken CryptoID follows international cross-platform standards thus suitable for multiple operating systems. Supported Operating System include the following:

- Windows XP, 2003, Vista, 7 , 8 , 10 (both 32- and 64-bit)
- Windows SERVER 2003/2012/2015 and more
- Linux 2.6 and more
- Mac OS X 10 and above

Meanwhile, multiple secure algorithms and middleware are also supported.

Seamless Integration

mToken CryptoID offers Microsoft Mini Driver, Microsoft Crypto API and PKCS11 interface; supports multiple certificates and key pairs. All applications compatible with these standard interfaces can be integrated with and hence secured.

COS features

- ISO 7816 Standard
- Support for 3DES, AES128/192/256, SHA1/SHA256/SHA384/SHA512, RSA(1024/2048), ECDSA256/521
- Support multiple applications, multiple containers and multiple certificates;
- Support for X.509 v3 certificate storing and certificate importing.

Software and Middleware

- In-built CD-ROM - designed for users to store custom middleware
- Support for mToken API libraries, mToken PKI middleware (for PKCS11 v2.2 and MS-CAPI applications) and self-defined interfaces.

About Century Longmai

Established in 2003, Century Longmai Technology Co., Ltd is one of the most leading information security device vendors in China with over 12 years' experience developing latest generation of digital security solutions and products for secure information access and transmission. Our product portfolios include PKI dongles, wireless PKI tokens, OTP tokens, smart card, smart card readers, electronic document protection solution, software license dongles, Smartcard readers and OEM services. Proved to be secure and convenient, our solutions and products are dedicated to help customers build safe, efficient and sustainable networks, financial systems and enjoy secure access to data and information everywhere whenever they want.

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